

**Amendments to the Specification**

Please amend paragraphs [0029] and [0030] to read as follows:

[0029] Fig. 2 is a graph showing some spectra obtained through the instrument of Fig. 1; [[and]]

[0030] Fig. 3 is a graph of some test curves of the instrument of Fig. 1[[.]]; and

Please add the following new paragraph after paragraph [0030]:

[0030.1] Fig. 4 is a flow chart depicting the method according to the invention.

Please replace the Abstract of the Disclosure Section with the following amended section:

ABSTRACT OF THE DISCLOSURE

A method ~~for~~ is provided for measuring by ionization mobility spectrometry (IMS) relatively high concentrations of water in argon, hydrogen, nitrogen and/or helium, including the following ~~operative~~ steps: (a) introducing the gas to be analyzed into an IMS instrument (10) with a counter-flow of pure gas; (b) obtaining a signal (19) variable over time and proportional to the number of ions detected by an ion detector (14) of the IMS instrument (10); (c) determining two time intervals (A, B) corresponding to the drift times in the IMS instrument (10) of the  $\text{H}_3\text{O}^+$  and  $(\text{H}_2\text{O})_2^+$  ions; (d) obtaining the peaks of the signal (19) in the two determined time intervals (A, B); and (e) calculating the water concentration in the gas to be analyzed according to the ratio between the intensity of the two peaks obtained in the signal (19).